# OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833 (916) 274-5721 FAX (916) 274-5743 Website address: www.dir.ca.gov/oshsb



# PROPOSED PETITION DECISION OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD (PETITION FILE NO. 484)

# **INTRODUCTION**

The Occupational Safety and Health Standards Board (Board) received a petition on April 24, 2006, from Russell E. Hutchison, (Petitioner), Director, Technical and Safety Services of the Association of Equipment Manufacturers (AEM). The Petitioner requests the Board to amend Title 8, California Code of Regulations, Subchapter 4, Article 10, Section 1596(g)(4) of the Construction Safety Orders (CSO) regarding Roll-Over Protective Structures (ROPS) seat belt width.

Labor Code Section 142.2 permits interested persons to propose new or revised standards concerning occupational safety and health, and requires the Board to consider such proposals, and render a decision no later than six months following receipt. Further, as required by Labor Code Section 147, any proposed occupational safety or health standard received by the Board from a source other than the Division must be referred to the Division for evaluation, and the Division has 60 days after receipt to submit a report on the proposal.

#### **SUMMARY**

The Petitioner describes the AEM as a North American-based international trade group representing the business interests of companies that produce and market equipment, products and services used worldwide in the construction, agriculture, road building, mining, energy, forestry and utilities fields. According to the Petitioner, California is the only state that requires the use of a 3-inch wide seat belt on haulage and earthmoving vehicles equipped with ROPS. The remaining states use the Society of Automotive Engineers (SAE) J386 national consensus standard. When equipment is rented or purchased and moved to California or is sent to California for use by a multi-state contractor, the equipment is not in compliance with California standards. The Petitioner contends that the end users, contractors, find it expensive and time consuming to design and install seat belts to meet the California standard which differs from all other state, national and international requirements for seat belt web width.

Title 8, Subchapter 7, Group 4, Article 25, Section 3653(a) of the General Industry Safety Orders (GISO) and Title 8, Subchapter 13, Article 9, Section 6309(h) of the Logging and Sawmill Safety Orders (LSSO) incorporate by reference SAE J386 seat belt requirements. Therefore, these two sections require that seat belts conform to the 1.8-inch belt webbing specification contained in the SAE J386 standard. The Petitioner contends that there is no reason to have a different seat belt web width requirement for the CSO.

The Petitioner added that the seat belt breaking strength requirement is the same, 6,000 pounds, for the CSO Section 1596(g)(4) and the SAE J386 standards.

# **DIVISION'S EVALUATION**

The Division's evaluation report dated July 3, 2006, states the Division supports granting the Petitioner's request to the extent that the Board convene an advisory committee to examine the technical merits of the Petitioner's proposed amendments.

# **STAFF'S EVALUATION**

Both seat belt standards, CSO Section 1596(g)(4) and the SAE J386-2006 require strength testing of 6,000 pounds for the seat belt webbing. The 3-inch wide seat belt requirement contained in Section 1596(g)(4) was originally believed to be more effective in distributing shock forces and reducing the amount of stress put on the operators' waist, thus minimizing the cumulative trauma to the body when operating construction haulage and earthmoving equipment on uneven terrain. However, recent improvements in (1) haulage and earthmoving equipment suspension,

(2) advanced hydraulic and vibration isolating systems, (3) smoother-ride all terrain tires, and (4) shock absorbing ergonomically designed seats have greatly reduced the physical stress upon the operator's body and waist area. Staff believes that these improvements warrant reexamination of this standard. Staff also recognizes that there is older equipment in use today that may not have benefited from these more recent equipment ride improvements and that the 3-inch wide belt webbing might still provide benefit to the operator to minimize the hazard of cumulative trauma to the lower body.

Board staff agrees with the Petitioner that consistency is needed in the CSO, GISO and LSSO. The types of haulage equipment used in logging operations are quite similar to those used in the construction industry and are also operated on rough and uneven terrain where the operator could be subjected to repetitive jarring, bouncing motions. Yet, staff's preliminary investigation found no documentation to suggest that the 1.8-inch wide seat belts permitted by Section 6309(h), in logging operation use of haulage equipment has caused operators any injuries related to lower torso trauma.

The Petitioner's proposal would modify Section 1596(g) to reference the SAE J386 and eliminate Sections 1596(g)(1)-(9), except for reference to a Note on agricultural and industrial tractors. The specifications contained in these sections which pertain to the design, installations, and testing of haulage equipment restraint systems are all represented in the SAE J386 standard.

Review and analysis of the Division of Labor Statistics and Research, Division of Occupational Safety and Health, Integrated Management Information System accident reports show no correlation between reports of injury or accidents involving haulage equipment operators using the 3-inch seat belt in California or with other states where the minimum 1.8-inch wide belt webbing is permitted.

Board staff believes the Petitioner's request has merit, since 1) all other states use the SAE J386 standard which allow a minimum 1.8-inch wide seat belt webbing, 2) there is inconsistency

Proposed Petition Decision Petition File No. 484, Roll-Over Protective Structures Page 3 of 3

between the CSO, GISO and LSSO, and 3) an increased burden is placed upon manufacturers and end users to install and retrofit the 3-inch wide seat belt system in haulage vehicles used in California. Board staff searched several international haulage equipment ROPS standards and found that Australia and the Canadian province of British Columbia Occupational Safety and Health standards also incorporate the SAE J386 standard.

The Board staff believes the Petitioner's request has merit and should be granted to the extent that a representative advisory committee be convened to consider the Petitioner's request.

# CONCLUSION AND ORDER

The Occupational Safety and Health Standards Board has considered the petition of Russell E. Hutchison, (Petitioner), Director, Technical and Safety Services of the Association of Equipment Manufacturers, to make recommended changes to Section 1596(g)(4) of the Construction Safety Orders regarding Roll-Over Protective Structures seat belt width. The Board has also considered the recommendations of the Division and Board staff. For reasons stated in the preceding discussion, the petition is hereby granted to the extent that a representative advisory committee be convened and if consensus is reached, a proposal be brought to the Board for consideration at a future Public Hearing.